

- 14 -

ABSTRACT

A low-power, software based modulator that is used to transfer text data from an auxiliary audio device to an FM radio receiver includes a processor that receives the text data to be transmitted to the FM receiver, processes the data as an RDS signal or
5 converts the text data to speech and then combines the processed data signal with an FM audio signal that is sent to the FM receiver. In one embodiment, the auxiliary audio device is a CD or CD-MP3 player and the software-based modulator is implemented on the control processor or DSP of the device. The FM encoder that produces the FM encoded audio
10 signal may be a separate analog encoder or may also be implemented in the control processor of the auxiliary audio device.